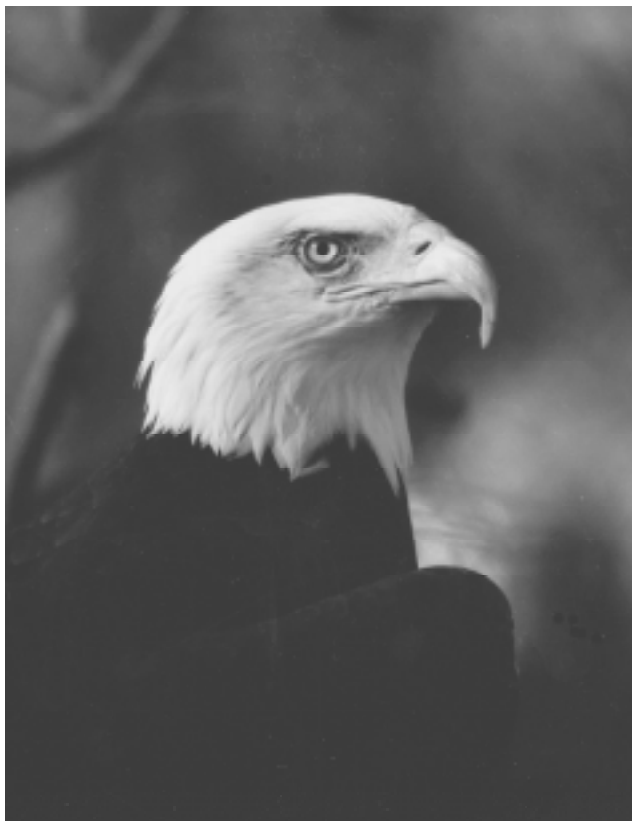




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BALD EAGLES *of Wolf Lodge Bay*



*U.S. Department of the Interior · Bureau of Land Management
Upper Columbia - Salmon Clearwater Districts*

FERCE, MAJESTIC, POWERFUL —AND IN PERIL



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Bald eagles evoke images that are matched by few other animals. At the apex of flight, serenely perched on a tree, or boldly diving

toward prey, they are at once fierce, majestic, powerful and independent. It's little wonder that they were chosen as our nation's emblem.

Bald eagles are found along the Northwest coast from Washington to the Aleutian Islands. They also inhabit parts of interior Alaska, Canada, the Mississippi Valley, the area from the Great Lakes Region east to the Maine Coast and the southeastern coastal region.

They once flourished in many parts of the country, but their populations drastically declined in the last century. Humans are the biggest threat to bald eagles. Much of the bald eagles' habitat was lost, many of the birds were shot, and they were exposed to widespread contaminants. Between 1917 and 1952, for example, a bounty was placed on bald eagles in Alaska because fishermen believed the birds competed with them for salmon. Although the belief was later shown to be unfounded, more than 100,000 birds were killed during the 35 years the bounty was in effect.

In 1940, Congress passed a law that prohibited killing the birds and protected their habitat. Still, populations continued to fall.

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Fish, the preferred prey of bald eagles, were killed by water pollution. Persistent pesticides, such as DDT, which disrupts a bald eagle's reproduction system, lingered in the environment. In 1978, bald eagles were designated as an endangered species in 43 states and a threatened species in five more. Only recently have populations started to recover. In 1995, bald eagles were reclassified as threatened in the lower 48 states, and nesting is increasing in many areas. That's good news, but the birds have a long way to go before they are out of danger.

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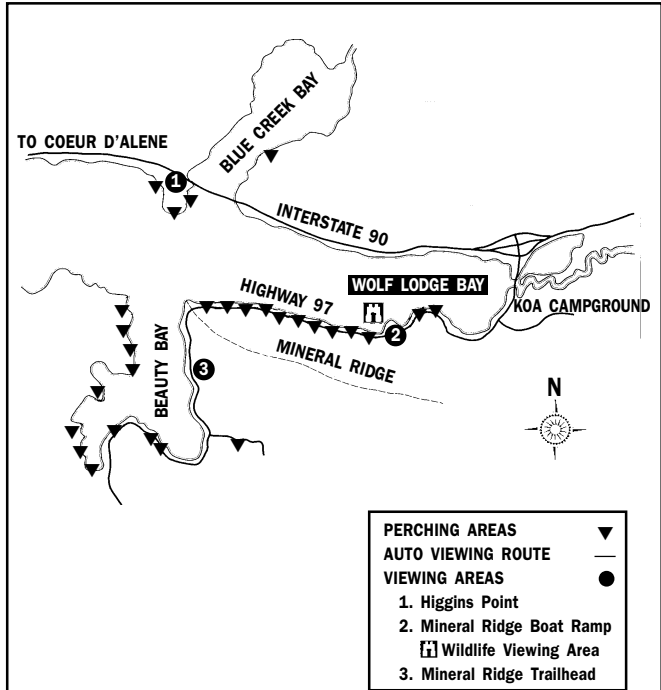
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EAGLE VIEWING AREAS



SAFETY & VIEWING TIPS

- ❏ Avoid flushing the birds. Do not approach them on foot.
- ❏ Stay as far from the birds as possible. Binoculars are essential.
- ❏ Stay in your vehicle if viewing nearby birds.
- ❏ Park off the main road. Suggested viewing areas are Higgins Point, Mineral Ridge Boat Ramp, and the Mineral Ridge Trailhead.
- ❏ Do not stop on the road or look for eagles while driving. Interstate 90 and Highway 97 are heavily traveled. Remember, it is illegal to stop in any traffic lane.

WINTER REFUGE

Canadian winters bring deep snows and sub-zero temperatures to bald eagle habitat. Prey disappears.

Each fall the birds leave their nesting areas in the north and migrate southward to milder climates where they spend the winter.

Eagles pair for life. They remain aloof from other pairs in their northern nesting areas, raising their young and feeding on fish. As they migrate southward, bald eagles become more social, often congregating at wintering grounds.

The Wolf Lodge Bay area of Coeur d'Alene Lake in northern Idaho is one of many wintering grounds along the eagles' annual migration route.

From the lake shore rise steep mountains covered with western larch, Douglas-fir, ponderosa pine and grand fir. Northern Idaho's average winter temperature of 22°F and average annual snowfall of 60 inches is mild compared to the frozen country that lies to the north.

Wolf Lodge Bay's rocky shores, submerged gravel beds and unique water ecology are why the area lures so many eagles. It is ideal habitat for kokanee salmon, a primary winter food source for bald eagles. Wolf Lodge Bay harbors an abundant supply of these small, landlocked salmon. The blend of rugged topography, dense tree growth, mild climate and, ample food draws eagles to Wolf Lodge Bay each winter.

Wolf Lodge Bay is seven miles southeast of Coeur d'Alene, Idaho, and is bordered by Interstate 90 to the north and Idaho Route 97 to the east and south. This makes the area surprisingly close and easily accessible to a town of about 25,000 residents.

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PHYSICAL FEATURES

Eagles have a beauty and grace fitting their status as our national emblem. As with most birds of prey, the female eagle is larger and heavier than the male. They weigh an average of 12 pounds with a maximum wingspan of seven feet and a body length of nearly three feet. Bald eagles are lighter than they appear. The bulk of an eagle is its feathers; its bones are hollow and much lighter than the bones of mammals.

Adult eagles are easily detected by their brilliant white heads and tail feathers and chocolate brown bodies and wings. They have black talons and yellow eyes, beaks and feet. The majority of the eagles at Wolf Lodge Bay are adults, but you may see several dark, mottled juvenile eagles. Immature eagles do not obtain their adult colors until they are about five years old.

In captivity, bald eagles have a life expectancy of up to 60 years. In their natural environment, the chance of bald eagles reaching such an age is slim because of environmental



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hazards and stresses. In the wild, almost 80 percent of young eagles

die during their first year, and many of the remaining 20 percent die before reaching maturity. Bald eagle productivity is naturally low, as with most other long-lived species.

Excessive mortality to these birds is much more serious than in species with higher rates of reproduction.

The eyes of eagles give them a hunting advantage. Eagles' eyes are eight times more powerful and sharper than human eyes and contain many times the number of color-sensitive cones. Their eyes are located on the side of the head, giving them a wide field of view. Although they have relatively poor night vision, during the day they can pinpoint their prey in vivid detail from great distances. At Wolf Lodge Bay their eyesight enables them to easily detect floating fish.

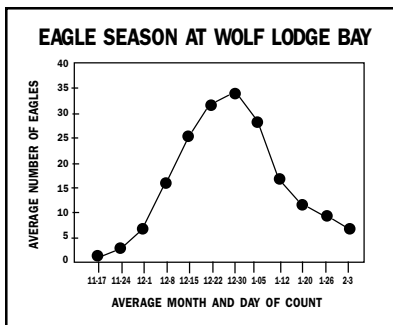
Bald eagles have large wings compared to other birds, allowing them to soar and hunt vast areas with a minimum of effort. During migration they can travel 400 to 500 miles a day. While not as quick and maneuverable as other birds, bald eagles have proven themselves to be skillful and agile hunters. Bald eagles have large, sharp talons and strong feet. As they swoop down on prey, their two-inch talons, or claws, easily sink into the flesh of the fish. Once settled on a perch to feed, you may also notice how adept they are at using their hooked beaks to rip the flesh from the fish.

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SEASONAL MOVEMENTS



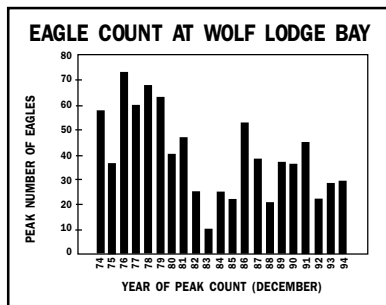
During November, the kokanee salmon of Coeur d'Alene Lake begin to spawn and die. Coinciding with this event is the arrival of the bald eagles at Wolf Lodge Bay. The

eagles are lured by the plentiful supply of spawned-out kokanee. More than enough fish are available to sustain the eagles through the winter.

Eagle populations at Wolf Lodge Bay rise and fall with the number of floating dead and dying kokanee. The eagles increase in number through December and reach peak populations generally between Christmas and New Year's day. By the third week in January the salmon supply begins to dwindle and most of the eagles have dispersed, leaving only a few in the area through February.

The last of the birds depart by mid-March to unknown destinations along their migration route before eventually returning to their traditional nesting sites. Eagles do not

nest at Wolf Lodge Bay, but they have been observed nesting in other parts of northern Idaho. The number of eagles observed from year to year varies from 10 to 73, with an average of 40.



DAILY ACTIVITIES

Bird watching at Wolf Lodge Bay has become increasingly popular over recent years and for good reasons. It's a place where you can see our national bird in its natural environment, close enough to observe it soaring, hunting or perched on a tree. Eagles circle above the water or peer down from the rugged limb of a larch snag. Studies of their daily activities reveal the complexity and magnificence of bald eagles' behavior and their role in the delicate balance of nature.

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FEEDING

Kokanee salmon were introduced into Coeur d'Alene Lake in 1937. It was not until after kokanee were introduced that bald eagles started inhabiting the area. These salmon mature in about four years and reach a length of about 11 inches. Their four-year life cycle ends in November as females lay eggs and males fertilize the eggs. After spawning, the fish die and float to the surface of the water, creating the abundant food source for the eagles.

Although most of the eagles' fishing takes place during the early morning, some feeding may take place throughout the daylight hours. Dawn finds the eagles arriving at the fishing area from their night roost. As they arrive, they position themselves on perches in trees near the water's edge. From these vantage points, they scan the water in search of dead or dying salmon.

Upon sighting their prey, the eagles glide from the perches, circle above the floating salmon, and in a descending spiral motion snatch the fish from the water. With the salmon firmly grasped in their talons, they return to nearby perches to feed.

Eagles that arrive in the fall before the salmon have begun to spawn or those that remain in the area through February and March when the salmon supply has diminished, must find another source of food. Ducks become their main prey. The impact on the waterfowl population is small though. Waterfowl killed are usually sick or injured ducks. Pellets of indigestible duck feathers can often be found under the perch trees of eagles. Ground beneath the perch trees where eagles feed is often littered with remains of partially eaten salmon. This seemingly wasted fish is actually an important food source for crows and ravens.

PERCHING AND SOARING

As mid-morning approaches, eagles begin to limit their feeding activity and settle on perches. They seem to prefer certain trees and even favorite limbs. The preferred perches are usually the taller trees with open branches close to the water. If weather conditions are inclement, the eagles are

likely to spend the rest of the day perched on branches of their favorite conifers.

On sunny or windy days, eagles take advantage of thermal currents and updrafts and soar high above the water. As wind speed increases, so do the soaring activities.



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During these times, eagles spend less time feeding and perching and more time flying. Eagles have been observed gliding in graceful, almost motionless flight for several hours at a time.

HABITAT PROTECTION

Of utmost importance to the eagle's future use of Wolf Lodge Bay is the continued, unaltered spawning of kokanee salmon along the shores of the bay. Without abundant spawned-out kokanee, the large concentration of eagles would not exist here. Also important is protection of the daytime perching areas.



EVA TESEO

The eagle habitat at Wolf Lodge Bay includes Bureau of Land Management (BLM), private, state and Forest Service land. Several years ago, BLM developed a cooperative bald eagle habitat protection plan to ensure preservation of this winter sanctuary. The plan calls for maintenance of habitat and an ongoing monitoring effort focusing on the 332-acre BLM Bald Eagle Management Area along Wolf Lodge Bay and Beauty Bay.

As part of this effort, BLM biologists annually monitor the eagle population. Observations indicate two significant changes: during recent years the number of visitors viewing the birds has risen dramatically, and eagles are shifting from their daytime perch sites on Mineral Ridge to more remote perches on Wolf Point. The eagles are apparently abandoning their traditional perch sites as a result of disturbance by visitors to the area.

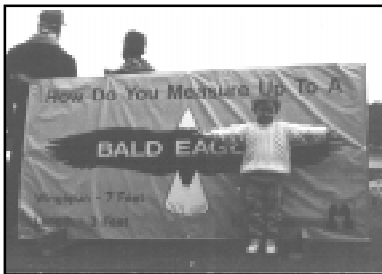
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No one really knows just how much disturbance would permanently drive the eagles away. Studies at Wolf Lodge Bay show that the eagles have some tolerance to humans, but the extent of it is unknown. Visitors need to limit their activities, such as walking along the road or approaching the eagles as they perch. They could cause these wild birds to fly away from the immediate area, spoiling the opportunity for other people to watch them. To avoid disturbing the eagles and for your own safety, please view the eagles from the BLM boat ramp or Mineral Ridge Trailhead.

VIEWING NOTES



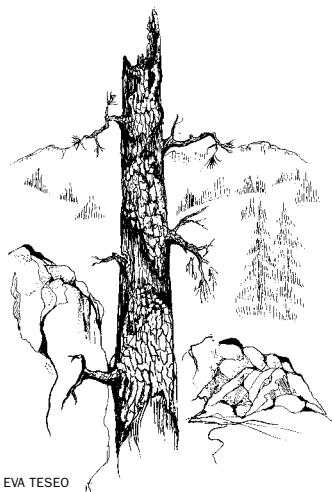
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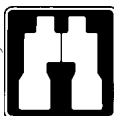
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